

REMARKS

1. Amendments and support therefor

Three new claims (32-34) have been added, and claims 5, 8, 11, 13, 17-20, 22, 25, 28, and 29 have been amended to leave claims 5-9, 11-13, 15-25, and 28-34 in the application. Dependent claims 6-9, 11-13, 15-17, and 32 ultimately depend from independent claim 5; dependent claims 19-21 and 28 ultimately depend from independent claim 18; dependent claims 23-25 ultimately depend from independent claim 22; and dependent claims 30, 31, 33, and 34 ultimately depend from independent claim 29. Fees for three new dependent claims are due. No new matter has been added by the amendments or new claims, which are supported by the disclosure. For example, new claim 34 finds support at least on page 13, line 24, to page 14, line 9.

2. Pages 2–3 of the Office Action: Rejections under 35 U.S.C. §112, ¶2

Claims 5, 13, 17, 18, 20, 22, 28, and 29 are rejected under 35 U.S.C. 112, paragraph 2, as allegedly being indefinite. The rejections are addressed by the above claim amendments and should kindly be withdrawn.

3. Pages 3–4 of the Office Action: Rejections under 35 U.S.C. §102

Claims 5, 9, 16, and 29 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 5,162,150 (*Buis et al.*). We submit these rejections should be withdrawn at least for the following reasons.

Initially, we note that *Buis* is not directed to bridging gaps between modular buildings using a reinforced tape. Instead, *Buis* is directed to providing a more economical and lightweight tape that is easy to separate from the roll. See *Buis* col. 1, ll. 10-13. At least for this reason, we submit that *Buis* cannot anticipate at least independent claim 5.

The Office Action alleges that “the tape of *Buis* contains all the same structural elements as applicant’s claimed invention and therefore is certainly capable of the same claimed bridging without sagging.” See Office Action pg. 3. The Office Action appears in effect to be taking an inherency position: that the alleged presence of a tacky adhesive layer and reinforcing layer in *Buis* means that the tape of *Buis* inherently is configured to bridge a gap of four inches between building modules without sagging more than 0.5 inches. This position is unsupportable at least for the following reasons.

First, the Office Action provides no basis in fact and/or technical reasoning to support the allegation that, because of its structure, the tape of *Buis* is necessarily configured to bridge gaps as recited in independent claim 5. MPEP §2112 IV states that (emphases added):

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’ ” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). ... **“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.”** *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)

Buis does not disclose, among other things, that its tape can bridge gaps between building modules, and it does not disclose any characteristics that allow it to avoid sagging when bridging gaps between building modules. **The allegedly inherent characteristic does not necessarily flow from the teachings of *Buis*.** Accordingly, the Office Action improperly concludes that the tape of *Buis* “is certainly capable of the same claimed bridging without sagging” at least because no basis is provided for this allegation.

Second, *Buis*’s disclosure reveals that its tape is not fit for the heavier-duty role of bridging gaps between building modules. *Buis* discloses “a pressure sensitive tape which is economical to produce, **is light weight, can readily be separated from the roll of tape** and has an even coat of pressure sensitive adhesive on the adhesive side of the fabric.” See *Buis* col. 1 ll. 11-14 (emphasis added). The carrier fabric 14 of *Buis* (the alleged reinforcing layer of claim 5) is made up of warp yarns 17, 19 of 40-150 denier and weft yarns 20 of 25-200 denier. See *Buis* col. 1 ll. 41-47. “The resultant tape ... is light-weight ... and can be readily torn from the roll.” See *Buis* col. 2 ll. 10-11, 17-18. *Buis* discloses a duct tape that does not possess the characteristics that would make it suitable for bridging gaps between adjacent building modules at construction sites. *Buis* thus cannot disclose the features recited in claim 5.

Prior to this invention, manufacturers of modular buildings often placed stiff bridging members (such as luan plywood strips or vinyl siding strips) under an adhesive-backed tape to avoid sagging into the gaps between adjacent building modules. Such prior techniques had significant drawbacks. For example, non-conforming joints result, and such joints develop leaks as the prior tapes would not readily conform to irregular surfaces. Moreover, use of separate bridging material results in substantial additional costs of materials, and the additional labor and time required for preparation and installation thereof. These prior seal arrangements are also difficult to cut through and disassemble or remove in the event that the modules are to be disassembled, or should inspection or repair of the joint or underlying structure become necessary. The tape disclosed in *Buis* does not address these issues and would suffer from the same drawbacks.

We submit that independent claim 5 is patentable at least because *Buis* cannot anticipate it. Claims 9, 16, and 29, which depend from claim 5, are also patentable at least by virtue of their dependency from claim 5, and by virtue of the additional features recited therein. We also submit that independent claim 29 is also patentable at least for the reasons submitted with respect to independent claim 5.

4. Pages 4–11 of the Office Action: Rejections under 35 U.S.C. §103

Claims 6-8 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Buis*. Claims 11-13, 15, 17-21, 28, 30, and 31 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Buis* and U.S. Patent No. 7,000,360 (*Russell et al.*). Claims 22-25 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 4,996,812 (*Venable*) in view of *Buis*.

a. Submissions Under 37 CFR §1.132

In accordance with 37 CFR §1.132, Applicant declares the following facts in traversal of the rejections under 35 U.S.C. §103. The signature of Applicant attesting to the facts submitted herein is provided at the end of this document to satisfy the requirements of 37 CFR §1.132.

Applicant declares that it is selling an exemplary product in accordance with the claimed invention: the Self-Bridging Mate-Line™ (SBML). The SBML has had significant commercial success. This table shows the number of each size of rolls of SBML sold by year from 2001 to 2011 (through May 31):

	SELF-BRIDGING MATE-LINE™							
Year	9" X 65' BLACK	9" X 100' BLACK	12" X 65' BLACK	12" X 100' BLACK	18" X 65' BLACK	12" x 65' WHITE	12" X 100' WHITE	Totals by Year
2001	0	0	25	0	0	0	0	25
2002	353	6	276	347	119	0	4	1105
2003	441	195	561	362	135	0	164	1858
2004	1312	478	997	475	163	0	416	3841
2005	1411	932	1603	680	339	0	749	5714
2006	1062	437	1353	502	440	0	358	4152
2007	1258	258	2153	600	579	0	206	5054
2008	671	66	2340	816	867	213	190	5163
2009	431	92	1930	550	881	369	294	4547
2010	390	6	2008	709	1193	161	234	4701
2011 YTD 5/31	176	0	1046	229	527	78	183	2239
Totals by Size	7505	2470	14292	5270	5243	821	2798	38399

As can be seen, thousands of rolls are being sold each year, and at least 38,399 rolls of SBML have been sold since 2001.

The commercial success of SBML is directly related to the advantages provided by the features claimed in this Application. An example of Applicant's marketing materials states that "The company's exclusive design for a mate-line tape with built-in bridging material will save labor costs during setup and dismantling of multi-unit modular structures." See http://www.mulehide.com/info/self_bridging_mateline.aspx (last visited June 23, 2011). That is, Applicant advertises built-in bridging materials as an important and beneficial feature for modular building construction, commensurate with claimed features that distinguish the invention from prior products. Applicant's materials continue to state that:

Setup crews quickly learn the system and dealers love its economical speed of installation and dismantling. "[C]rews can expect up to 30 minutes less labor per installed mate-line versus traditional installation methods," explains Mule-Hide Modular Program Manager, Walt Griffin. "Mule-Hide Self-Bridging Mate-Line saves seven to ten percent on material costs and is available in black for black EPDM roofing systems and white for white EPDM roofing systems," states Griffin.

That is, SBML is easy to learn and saves time during installation and dismantling over prior methods, resulting in large part from the flexibility of the tape to be rolled for easy transport and installation. SBML also saves material costs. A screenshot of this webpage is provided here:



What's New at Mule-Hide...

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MULE-HIDE INTRODUCES SELF-BRIDGING MATE-LINE™

Mule-Hide Products Co. Inc., Beloit, Wisconsin, introduces Self-Bridging Mate-Line™. The company's exclusive design for a mate-line tape with built-in bridging material will save labor costs during setup and dismantling of multi-unit modular structures.

"Mule-Hide understands the special needs of multi-unit setups. We custom designed a Mule-Hide Mate-Line Bridging System that in recent years has enjoyed wide acceptance as the system of choice. This system employed two products, Mule-Hide Mate-Line Tape along with Bridging Material. Now we've developed this exclusive one-product system using Mule-Hide Self-Bridging Mate-Line. Setup crews quickly learn the system and dealers love its economical speed of installation and dismantling. Crews can expect up to 30 minutes less labor per installed mate-line versus traditional installation methods," explains Mule-Hide Modular Program Manager, Walt Griffin. "Mule-Hide Self-Bridging Mate-Line saves seven to ten percent on material costs and is available in black for black EPDM roofing systems and white for white EPDM roofing systems," states Griffin.

Mule-Hide professional roofing systems to fit modular structures are sold nationwide and in Canada at local distributors near modular plants and offices. Also available are accessories and retrofit materials, such as professional grade, Mule-Hide Elastomeric Acrylic Coatings for metal roof retrofit.

For more information, call 800-786-1492 or Email mulehide@mulehide.com

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Statements of fact are sworn to by Applicant below. For at least these reasons, Applicant requests that the rejections under 35 U.S.C. §103 kindly be reconsidered and withdrawn.

b. Claims 6-8

Claims 6-8, which depend from independent claim 5, are patentable at least by virtue of their dependency. These claims are also patentable by virtue of the features recited therein. For example, regarding claim 8, *Buis* does not teach that carrier fabric 14 is a perforated plastic or metal strip. On the contrary, *Buis* discloses that carrier fabric 14 is an open mesh nonwoven scrim fabric made up of warp yarns 17, 18 and weft yarns 20. For at least these reasons, the rejection of claims 6-8 under 35 U.S.C. §103 should kindly be withdrawn.

c. Claims 11-13, 15, 17-20, 28, 30, and 31

Initially, according to the Federal Circuit, an inventor considering the problem being addressed by an invention would have to be motivated to consider the references when making his

invention. See *In re Arnold G. Klein*, 2010-1411 (June 6, 2011), pg. 12 (citing *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992) (“If [a reference] is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it.”)). The present invention is directed to a tape capable of bridging the gaps between modules of modular buildings. These gaps, which are typically up to four inches wide, were in the past filled with filler material and bridged using unenforced tape. Without the filler material, the traditional tapes would sag into the gaps, breaking any seal that was formed by the tape between the modules. Other disadvantages of the traditional techniques are discussed above. To overcome these disadvantages, a reinforced tape with the recited features was developed, effectively combining the roles of the tape and filler. The invention is not merely limited to a reinforced tape. It provides for a tape that is able to effectively bridge gaps between modular buildings while providing for ease of use. The structural characteristics of its various embodiments must strike a necessary balance between stiffness and flexibility so that the tape provides the rigidity to avoid sagging into gaps as well as the flexibility to be rolled into a tape for use by construction personnel.

By contrast, *Buis* is directed to a light-weight duct tape that is readily torn from a roll, and *Russell* is directed to a walkway pad having a pre-applied adhesive on its lower surface. Neither *Buis* nor *Russell* is directed to bridging gaps between modules of modular buildings, much less to striking the balance between rigidity and flexibility discussed above. Accordingly, an inventor would not have been motivated to consider these references in addressing the problems addressed by the present invention. **As such, under *In re Klein*, *Buis* and *Russell* cannot be properly applied to reject claims 11-13, 15, 17-20, 28, 30, and 31, and the rejections should thus be withdrawn.** These claims are also patentable by virtue of the additional features recited therein, examples of which are discussed below. Claims 11-13, 15, and 17 are also patentable by virtue of their ultimate dependency from independent claim 5.

Regarding claims 11, 12, and 15, the Office Action alleges that “[i]t is notoriously common and well known to make a rubber gum pressure sensitive adhesive from at least some or all of the claimed materials including a blend of uncured Butyl and semi-cured polymers or cross linked polymers. For example, Russell discloses that it is known to make a rubber gum adhesive with butyl rubber, natural rubber, or EPDM as well as others ... with a blend of uncured Butyl and semi-cured polymers or cross-linked polymers.” See Office Action pgs. 5-6, and also pg. 9. However, *Russell*

discloses that “most pressure sensitive adhesives used to join rubber roofing membranes together included a rubbery polymer composition based on butyl rubber or butyl rubber blended with various amounts of EPDM.” See *Russell* col. 2 ll. 16-20. *Russell* does not discuss rubber gum, or suitability of using such pressure sensitive adhesives with carrier fabric as disclosed in *Buis*. Accordingly, we submit the Office Action does not make a *prima facie* case of obviousness of these claims, and that claims 11, 12, and 15 are thus patentable over *Buis* and *Russell*.

Regarding claim 17, the Office Action, on page 6, alleges that it would have been an obvious matter of design choice to modify thicknesses of the alleged outer layer from **0.25-0.5 inches to 0.03-0.06 inches** (i.e., the walkway pads of *Russell* are approximately **ten times as thick**). **Changing the walkway pads of *Russell* to one-tenth their size is going to significantly diminish the ability of the walkway pads to provide protection and support. Such a modification would run contrary to the teachings of the references and would not be proper. See, e.g., MPEP §§ 2143.01 VI, 2143.02 VI.** Here, tapes in accordance with the present invention are designed to be easily transportable and conveniently usable in the field to bridge gaps between building modules. The thickness helps the tape to not interfere with the building modules being sealed together. It also enhances the ability of the tape to be rolled into a roll of tape. They use less raw material (and thus are less costly to manufacture) while enhancing their functions. For at least these reasons, *Russell* cannot be properly modified in this manner and the rejection of claim 17 is not proper.

Regarding independent claim 18, this claim is patentable for at least the reasons submitted above, such as comments submitted with respect to independent claim 5. Claim 28, which depends from claim 18, is patentable at least by virtue of its dependency from claim 18, by virtue of the additional features recited therein, and for other reasons discussed above.

Regarding claims 19 and 21, these claims are patentable at least for the reasons submitted above. Claims 19 and 21 are also patentable by virtue of their dependency from claim 18, and by virtue of the additional features recited therein.

Regarding claim 20, this claim is patentable at least for the reasons submitted above. Claim 20 is also patentable by virtue of its dependency from claim 18, and by virtue of the additional features recited therein.

Regarding claims 30 and 31, these claims are patentable at least for the reasons submitted above. Claims 30 and 31 are also patentable by virtue of their ultimate dependency from claim independent claim 29, and by virtue of the additional features recited therein.

For at least these reasons, the rejection of claims 11-13, 15, 17-21, 28, 30, and 31 under 35 U.S.C. §103 should kindly be withdrawn.

d. Claims 22-25

Claim 22 is patentable at least for the same or analogous reasons as those discussed above. For example, *Venable* and *Buis* may not be properly combined and modified to reject claims 22-25. Like *Buis*, *Venable* is not directed to (or appropriate for) bridging gaps between modular buildings using a tape that strikes an appropriate balance between rigidity and flexibility. A person of ordinary skill would thus not be motivated to consider *Venable* and *Buis*, and these references cannot suffice in making a *prima facie* case of obviousness. **Also, contrary to the position on pages 11-13 of the Office Action, *Venable* does disclose adjacent modular buildings with a gap therebetween, the gap being bridged by a tape having recited features.** The cited references (alone or in combination) do not teach the recited features, and cannot render at least claim 22 obvious.

Claims 23-25, which ultimately depend from independent claim 22, are patentable at least by virtue of their dependency, and by virtue of the additional features recited therein. For example, claim 25 recites a method of using the roof system that is not taught by *Venable* and/or *Buis*. As previously discussed, traditional techniques of bridging gaps between adjacent modular buildings often involve the use of stiff bridging members not necessary when using a tape in accordance with the present invention.

For at least these reasons, the rejection of claims 22-25 under 35 U.S.C. §103 should kindly be withdrawn.

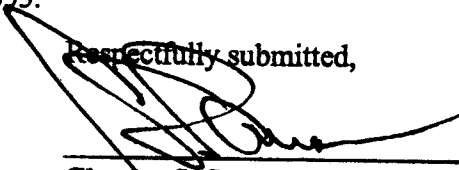
5. New Claims 32-34

New claims 32-34 are patentable at least for reasons analogous to those discussed above. Claims 32-34 are also patentable at least as a result of their dependency, and because of the additional features recited therein.

6. **In Closing**

Should the Examiner have any questions or comments with respect to the application, the Examiner is requested to contact the undersigned attorney. The attorney welcomes and encourages telephone calls related to this application because this may allow the resolution of disputed claim language and/or other informalities more rapidly and efficiently than by any other means. The Commissioner is authorized to charge any fees or credit any overpayments relating to this application to deposit account number 18-2055.

Respectfully submitted,


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7. **Declaration Under 37 CFR §1.132**

I DECLARE THAT all statements made herein of my own knowledge are true; all statements made on information and belief are believed to be true; that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC §1001; and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


Kurt Fago

7/1/11
Date